ATTACHMENT

VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice amended) A chemical sensor for detecting a quantity of a chemical, the chemical sensor comprising:

a sensor element producing a measurable signal when activated; and

a polymeric film disposed on a surface of the sensor element, the polymeric film comprising at least one hardblock component and at least one softblock component, the polymeric film being capable of capturing a portion of the quantity of the chemical and inducing a measurable change in the signal, the change in the signal being relatable to the quantity of the chemical adjacent to the sensor element.

4. (Amended) A chemical sensor [according to claim 1] for detecting a quantity of a chemical, the chemical sensor comprising:

a sensor element producing a measurable signal when activated; and

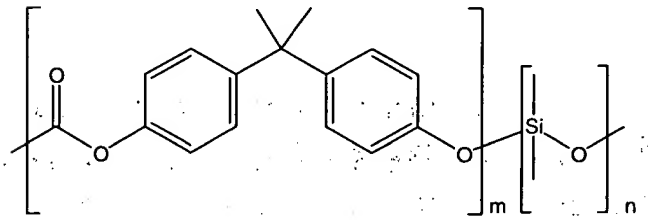
a polymeric film disposed on the sensor element, the polymeric film comprising at least one hardblock component and at least one softblock component, the polymeric film being capable of capturing a portion of the quantity of the chemical and inducing a measurable change in the signal, the change in the signal being relatable to the quantity of the chemical adjacent to the sensor element, wherein the polymeric film comprises at least one polymer selected from polyester elastomer, polyether block polyamides, silicone polyimides, and combinations thereof.

7. (Amended) A sensor according to claim [1] 4, wherein the polymeric film comprises polyester elastomer, the polyester elastomer comprising the softblock component and the [hard] hardblock component.

9. (Amended) A sensor according to claim [1] 4, wherein the polymeric film comprises polyether block polyamides.

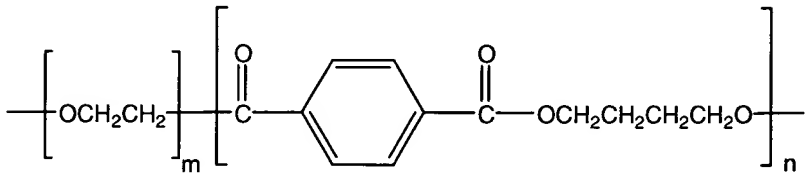
11. (Amended) A sensor according to claim [1] 4, wherein the polymeric film comprises silicone polyimides, the silicone polyimides [comprises] comprising hardblock and softblock elastomers.

14. (Twice amended) A sensor according to claim [1] 4, wherein the polymeric film comprises:



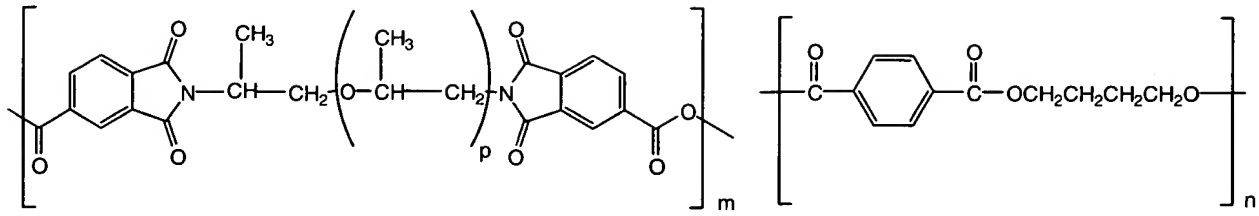
wherein m is in arrange from about 1 to about 4 and n is from about 3 to about 20.

15. (Twice amended) A sensor according to claim [1] 4, wherein the polymeric film comprises:



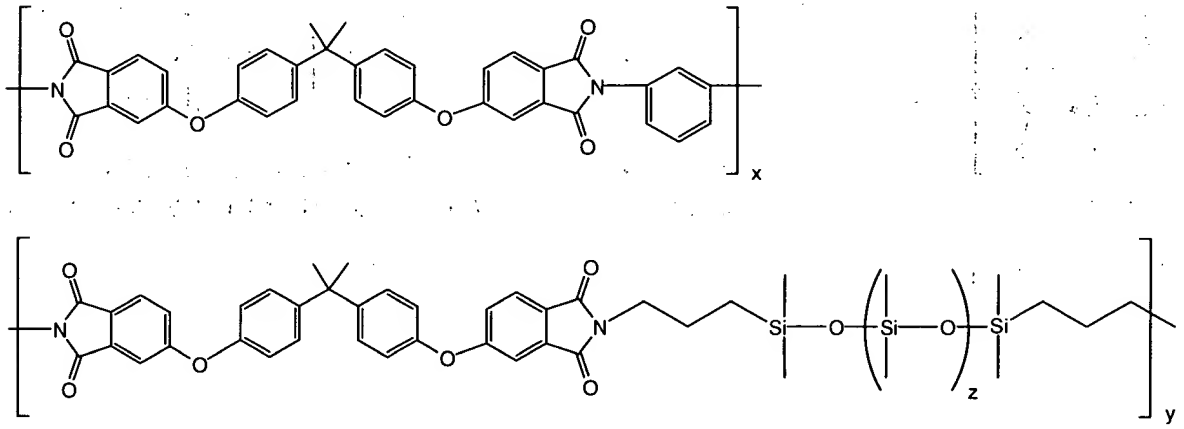
wherein m is in a range from about 10 to about 300 and n is in a range from about 5 to about 300.

16. (Twice amended) A sensor according to claim [1] 4, wherein the polymeric film comprises:



wherein m is in a range from about 1 to about 60, p is in a range from about 10 to 200, and n is in a range from about 5 to about 300.

17. (Twice amended) A sensor according to claim [1] 4, wherein the polymeric film comprises:



wherein x is in a range from about 1 to about 60, y is in a range from about 40 to 65, and z is in a range from about 3 to about 20.

36. (Amended) A method [according to claim 33] for enhancing detection of a target compound by a sensor, the method comprising:

providing a sensor having a sensor element that produces a characteristic response when activated;

disposing a polymeric film on a surface of the sensor element, the polymeric film being able to capture a quantity of the target compound and producing a

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change in the characteristic response of the sensor element as a result of the capture of the target compound, wherein the polymeric film comprises at least one hardblock component and at least one softblock component; and

relating the change in the characteristic response of the sensor element to a quantity of the target compound adjacent to the sensor element, wherein the polymeric film comprises at least one polymer selected from polyester elastomer, polyether block polyamides, silicone polyimides, and combinations thereof.

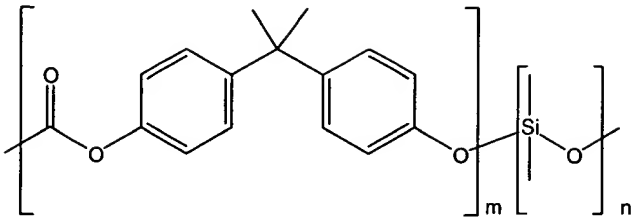
39. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises polyester elastomer, the polyester elastomer comprising the softblock component and the hardblock component.

41. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises polyether block polyamides.

43. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises silicone polyimides, the silicone polyimides [comprise] comprising hardblock and softblock elastomers.

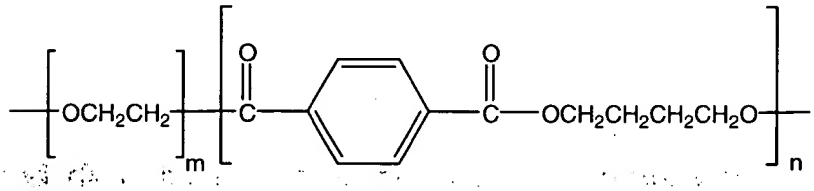
44. (Amended) A method according to claim [33] 36, wherein the sensor element comprises [a sensor substrate, the sensor substrate comprises] a quartz crystal microbalance (QCM) sensor [is provided with] that comprises an AT-cut quartz crystal substrate with gold (Au) electrodes.

46. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises:



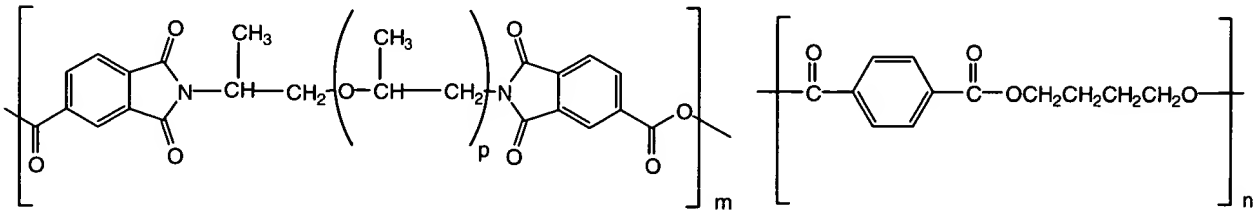
wherein m is in arrange from about 1 to about 4 and n is from about 3 to about 20.

47. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises:



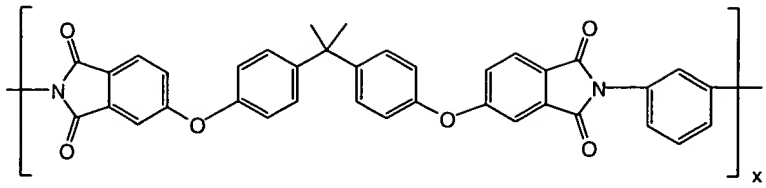
wherein m is in a range from about 10 to about 300 and n is in a range from about 5 to about 300.

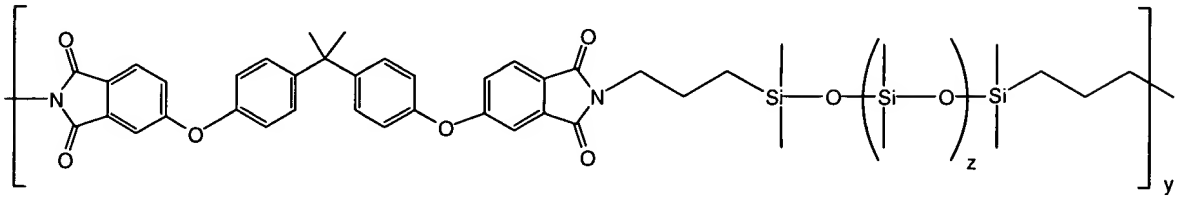
48. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises:



wherein m is in a range from about 1 to about 60, p is in a range from about 10 to 200, and n is in a range from about 5 to about 300.

49. (Amended) A method according to claim [33] 36, wherein the polymeric film comprises:





wherein x is in a range from about 1 to about 60, y is in a range from about 40 to 65, and z is in a range from about 3 to about 20.